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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/733,458   | 12/11/2003  | John Eaton           | 49454/295322        | 8792             |
| 23370  | 7590        | 09/16/2004           | EXAMINER            |                  |
| JOHN S. PRATT, ESQ<br>KILPATRICK STOCKTON, LLP<br>1100 PEACHTREE STREET<br>ATLANTA, GA 30309 |             |                      | GUSHI, ROSS N       |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2833                |                  |

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,458

Applicant(s)

EATON ET AL.

Examiner

Ross N. Gushi

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to show numerous details of the invention as described in the specification. The various parts cannot be distinguished from each other in the figures. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**Correction is required in response to this Office action and corrections may not be held in abeyance.** Applicant is required to submit acceptable corrected

drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

### ***Claim Objections***

Claims 1-7 are objected to under 37 C.F.R. Rule 1.75(d)(1). The terms and the phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. In particular, it is not clear what structure is being identified as the "outer shell" because this structure was not clearly identified in the specification. Correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the limitation of a connector "disposed in use" is vague and indefinite. It is not clear whether applicant is claiming a connector for use between the store and the aircraft or whether applicant is claiming a connector in fact between a store and an aircraft. The limitation is treated as requiring a connector in fact disposed between an aircraft and a store to be released from the aircraft.

Regarding claim 7, the term "EMC shielding" is not defined in the specification or claims and is indefinite. "EMC" is not defined and it is not clear what it means or what the limitation of "EMC shielding" requires. The limitation is given little weight.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in —

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a);

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Acord No. 3,430,184 ("Acord"). Per claim 1 and 7, Acord discloses an electrical connector disposed in use between a store and an aircraft, a first half of the connector being mechanically connected to one of the store and a second half of the connector being connected to an electrical cable attached to the other of the store or the aircraft/dispenser, the connector second half comprising a core (19, 22) containing electrical contacts and an outer shell (see e.g. parts identified by reference numbers 48, 36, 39) snap-engageable with the first connector half to securely retain the connector

Art Unit: 2833

second half in mating engagement with the connector first half while the store is being carried by the aircraft/dispenser, the outer shell being pulled off the connector first half as the store is separated from the aircraft, the outer shell being formed as a separate component or assembly, removably attached to the connector second half core.

Per claim 2, the snap-engagement is provided by a resilient finger 42 extending axially between the first and second connector halves, the finger being attached to one of the connector halves and engageable with a detent (threads 28) provided on the other connector half.

Per claim 3, the finger is attached to a ring mounted on a sleeve comprising the outer shell.

Per claim 4, the detent is a circumferential rib (in particular, threads 28) formed on a collar connected to the connector first half.

Per claim 5, the outer shell comprises an attachment ring rotatable about the second connector half and to which ends of a lanyard 56 are anchored.

Per claim 6, the outer shell is held on the connector second half core by a threaded clamping ring 36.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratchford in view of Acord as discussed regarding claims 1-7. Per claim 1, Ratchford discloses all of the claimed structure (see figure 1), however Ratchford does not show the connector disposed in an aircraft between the store to be released and the aircraft. Acord discloses a similar connector between an aircraft and a store 11 to be released. At the time of the invention, it would have been obvious to use the Ratchford connector between an aircraft and a store as suggested by Acord. The suggestion or motivation for doing so would have been to achieve a quick and positive release between the store and aircraft as taught in Acord and Ratchford (see Ratchford col. 1 and Acord col. 1).

### ***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Acord '743, Vetter, Werth et al. and Knapp disclose quick release connectors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (571) 272-2005. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at 571-272-2800 extension 33. The phone number for the Group's facsimile is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2833

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ROSS GUSHI**  
**PRIMARY EXAMINER**